

# STATE OF COLORADO

Bill Ritter, Jr., Governor  
James B. Martin, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department  
of Public Health  
and Environment

April 1, 2009

PWSID# CO-0145120

East End Water Association

Attention: Jerry Bay

34510 County Road

La Junta, CO 81067

Certified Mail Number: 7007 0220 0001 0160 6099

## RE: Service of Amendment to Enforcement Order DC-051107-1

Dear Mr. Bay:

East End Water Association is hereby issued the enclosed amendment to the Enforcement Order that was issued to East End Water Association on November 7, 2005. This order amendment is issued by the Colorado Department of Public Health and Environment's Water Quality Control Division (the "Division") pursuant to the authority given to the Division by §25-1.5-203 of the Colorado Revised Statutes.

Should you desire to discuss this matter with the Division or if you have any questions regarding the order amendment(s), please don't hesitate to contact Jackie Whelan at (303) 692-3617 or by electronic mail at [jackie.whelan@state.co.us](mailto:jackie.whelan@state.co.us).

Sincerely,

A handwritten signature in cursive script, reading "Kristi-Raye Beaudin".

Kristi-Raye Beaudin, Legal Assistant  
Compliance Assurance and Data Management Section  
WATER QUALITY CONTROL DIVISION

cc: Otero County Health Department  
Compliance Monitor / Drinking Water File

ec: Dave Knope, Engineering Section, CDPHE  
Dick Parachini, Watershed Program, CDPHE  
Betsy Beaver, Facility Operators Program, CDPHE  
Shawn McCaffrey, EPA Region VIII  
Jeff Lawrence, Director Consumer Protection Division, CDPHE  
Carolyn Schachterle, OPA

Enclosures



**COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT  
WATER QUALITY CONTROL DIVISION**

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**AMENDMENT TO ENFORCEMENT ORDER NUMBER: DC-051107-1  
NUMBER ONE**

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**IN THE MATTER OF: EAST END WATER ASSOCIATION  
PUBLIC WATER SYSTEM IDENTIFICATION NUMBER: CO-0145120  
OTERO COUNTY, COLORADO**

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Pursuant to the authority vested in the Colorado Department of Public Health and Environment (the "Department") by §25-1-109 and §25-1.5-203 of the Colorado Revised Statutes ("C.R.S."), which authority has been delegated to the Department's Water Quality Control Division (the "Division"), the Division hereby makes the following findings and issues the following Enforcement Order Amendment:

**GENERAL FINDINGS**

1. On November 7, 2005, the Division issued Enforcement Order Number: DC-051107-1 to East End Water Association citing violations of the Colorado Primary Drinking Water Regulations for failure to comply with the maximum contaminant level(s) for Combined Radium-226 and Radium-228 and Failure to Monitor and/or Report for Radium-226 and Radium-228. The Enforcement Order is attached hereto as Exhibit A and is incorporated herein by reference.
2. After re-evaluating the difficulties associated with the complying with the radionuclides maximum contaminant levels and in coordination with the Division's CORADS initiative, the Division is amending Enforcement Order number DC-051107-1 as follows:

**AMENDMENT NUMBER ONE**

3. Effective as of the issued date of this Amendment, Enforcement Order Number: DC-051107-1 is therefore amended to revise the Enforcement Order as follows:
  - A. Paragraphs 12 and 13 are superseded and replaced with the following new paragraphs 3A(i)-(ii):
    - i. A review of the radiological monitoring data from January 1, 2004, to present provided to the Department by the System, establishes that the running annual average of samples obtained by the System as required exceeds the maximum contaminant level

for Combined Radium-226 and Radium-228 or has not met the requirements to return to compliance with the Radionuclides Rule.

Combined Radium-226 and Radium-228 (in pCi/L)					
Sample Point	Quarter & Year / Result	Quarter & Year / Result	Quarter & Year / Result	Quarter & Year / Result	Running Annual Average
001T	Q1 2004 Failed to Sample	Q2 2004 Failed to Sample	Q3 2004 6	Q4 2004 Failed to Sample	6
001T	Q2 2004 Failed to Sample	Q3 2004 6	Q4 2004 Failed to Sample	Q1 2005 Failed to Sample	6
001T	Q3 2004 6	Q4 2004 Failed to Sample	Q1 2005 Failed to Sample	Q2 2005 Failed to Sample	6
001T	Q4 2004 Failed to Sample	Q1 2005 Failed to Sample	Q2 2005 Failed to Sample	Q3 2005 5	5
001T	Q1 2005 Failed to Sample	Q2 2005 Failed to Sample	Q3 2005 5	Q4 2005 6	6
001T	Q2 2005 Failed to Sample	Q3 2005 5	Q4 2005 6	Q1 2006 8	6
001T	Q3 2005 5	Q4 2005 6	Q1 2006 8	Q2 2006 4	6
001T	Q4 2005 6	Q1 2006 8	Q2 2006 4	Q3 2006 Failed to Sample	6
001T	Q1 2006 8	Q2 2006 4	Q3 2006 Failed to Sample	Q4 2006 Failed to Sample	6
001T	Q2 2006 4	Q3 2006 Failed to Sample	Q4 2006 Failed to Sample	Q1 2007 Failed to Sample	4
001T	Q3 2006 Failed to Sample	Q4 2006 Failed to Sample	Q1 2007 Failed to Sample	Q2 2007 4	4
001T	Q4 2006 Failed to Sample	Q1 2007 Failed to Sample	Q2 2007 4	Q3 2007 4	4
001T	Q1 2007 Failed to Sample	Q2 2007 4	Q3 2007 4	Q4 2007 5	4
002				ANNUAL 2008 5.6	6

- ii. East End Water Association's failure to comply with the maximum contaminant level for combined radium-226 and radium-228 and requirements for return to compliance with the maximum contaminant level for combined radium-226 and radium-228 constitutes violations(s) of 5 CCR 1003-1, §§2.6 and 6.3.2.

B. The compliance schedule specified in paragraph 21 is superseded and replaced with the following new paragraph 3(B)(i):

- i. In order to ensure long-term compliance with the maximum contaminant levels for Combined Radium-226 and Radium-228 the East End Water Association shall evaluate and upgrade, as needed, the System's water sources and/or treatment process(es) in accordance with the following schedule:

- a. By April 30, 2009, retain a qualified Professional Engineer (licensed in Colorado and experienced in drinking water systems) to evaluate and recommend radiological treatment technologies or alternate water sources to the East End Water Association to ensure compliance with the maximum contaminant level for Combined Radium-226 and Radium-228.
- b. By October 31, 2009, submit for Department review and comment a finalized Preliminary Engineering Report for system improvements to comply with the maximum contaminant levels for Combined Radium-226 and Radium-228. If an alternate water source is proposed, submit for Department review and comment a detailed description of the alternate water source along with a copy of the laboratory analyses supporting that the alternate water source is suitable.
- c. The Preliminary Engineering Report submittal package must be developed consistent with the Colorado Drinking Water Preliminary Engineering Report Guidance & Review Checklist Form. (see [http://www.cdphe.state.co.us/wq/opa/pdf/19\\_CPERGuideChecklistDW.pdf](http://www.cdphe.state.co.us/wq/opa/pdf/19_CPERGuideChecklistDW.pdf))
- d. The Preliminary Engineering Report (if applicable) must clearly identify the specific treatment technology the East End Water Association will use to ensure compliance with the maximum contaminant levels for Combined Radium-226 and Radium-228.
- e. The Preliminary Engineering Report (if applicable) must include a process flow schematic of the distribution system from wellheads to points of use, including flow rates, treatment facilities, storage tanks and all service connections supplied by the wells. Alternative treatment locations for the selected treatment process or processes must be evaluated with a recommended location selection. The process flow schematic information and evaluation must be included to ensure all water from the System is treated.
- f. The Preliminary Engineering Report (if applicable) must include a proposal for management of residuals from the treatment technology selected.
- g. The Preliminary Engineering Report (if applicable) submittal package must include design calculations showing the proposed treatment system is properly sized and chlorine contact times can be met for expected flow rates.

*{Please note that, prior to construction, the Department must give final approval to any modifications to the System's water source or treatment process. The Department will not perform a detailed review and final approval of any proposed modifications until the final design plans and specifications have been received pursuant to paragraph 4(B)(x) below.}*

- h. By February 28, 2010, submit for Department review and comment the final Design Report for the East End Water Association System improvements to comply with the maximum contaminant levels for Combined Radium-226 and Radium-228.
- i. By August 1, 2010, submit Final Design Plans and Specifications for the System improvements for Department review and approval in accordance with the State of Colorado Design Criteria for Potable Water Systems.
- j. The Final Design Plans and Specifications submittal package must include specifications for treatment equipment and/or chemical additives that come in contact with the water that indicate ANSI standards 60 and 61 are met (NSF certification).
- k. By October 15, 2011, complete construction/implementation of the Department approved System improvements to ensure long-term compliance with the maximum contaminant levels Combined Radium-226 and Radium-228.
- l. By December 1, 2011, submit the Professional Engineer's Certification that the System improvements to comply with the maximum contaminant levels for Combined Radium-226 and Radium-228 were constructed/installed as approved by the Department.

C. The monitoring requirements for Combined Radium-226 and Radium-228 specified in paragraph 25 is superseded and replaced with the following new paragraph 3(C)(i):

- i. Beginning January 1, 2009, East End Water Association is authorized to cease performing quarterly Combined Radium-226 and Radium-228 monitoring. In the alternative, East End Water Association shall perform annual Combined Radium-226 and Radium-228 monitoring consisting of collection of a single sample from each entry point to the distribution system one time per calendar year. The radiological samples must be properly collected and analyzed by a Department certified laboratory in accordance with approved methods. East End Water Association shall provide the Department with the results of the radiological analyses within ten (10) calendar days of the end of the monitoring period.

D. The following new paragraphs are incorporated into Enforcement Order Number DC-051107-1:

- i. By no later than April 30, 2009, the East End Water Association shall complete an evaluation to determine appropriate interim measures to ensure that the System is providing the best possible quality of water available until the System implements improvements to ensure long-term compliance with the radiological maximum contaminant levels. The East End Water Association shall submit a written report

of the results of this evaluation to the Division for review and comment. Implementation of the interim measures identified by the East End Water Association shall become a condition of this Enforcement Order unless notified by the Division, in writing, that alternate or additional interim measures are appropriate. If the Division imposes alternate or additional interim measures, they shall also become a condition of this Enforcement Order.

- ii. By no later than March 31, 2009, and every three (3) months thereafter, the East End Water Association shall issue a public notice in accordance with 5 CCR 1003-1, Article 9.2 for each radiological maximum contaminant level violation identified in this Enforcement Order until the East End Water Association has effectively addressed and returned to compliance with the radiological maximum contaminant levels outlined in 5 CCR 1003-1, §2.6, Table 2-7. Within ten (10) calendar days of completion of each required public notification, the East End Water Association shall submit to the Department, along with the mandatory Public Notification certification of delivery, a representative copy of notices distributed, published, posted, and/or made available to the persons served by the system and/or to the media. (Attached are copies of procedures and forms to assist you with the public notification requirements.)
  - iii. The East End Water Association shall submit "System Improvement Project - Progress Reports" to the Division every ninety (90) calendar days. The first report shall be submitted to the Division by March 31, 2009. At a minimum, each report shall clearly indicate the status of the system improvement project at the time the report is filed and outline activities to be undertaken within the next ninety (90) calendar days. Each report shall also detail any public notification provided during that period. These reports shall be required until the System has effectively addressed and returned to compliance with the radiological maximum contaminant levels outlined in 5 CCR 1003-1, §2.6, Table 2-7.
  - iv. All documents submitted under this Order Amendment shall use the same titles as stated in the Order Amendment, and shall reference both the number of the Order, amendment number, and the paragraph number pursuant to which the document is required.
- E. For all documents, plans, records, reports, and replies required to be submitted by the Order, East End Water Association shall submit an original and one copy (electronic is preferred) to the Division at the following address:

Colorado Department of Public Health and Environment  
Water Quality Control Division / WQCD-WQP-B2  
Compliance Assurance and Data Management Section / Enforcement Team  
Attention: Jackie Whelan  
4300 Cherry Creek Drive South  
Denver, Colorado 80246-1530  
Email: [jackie.whelan@state.co.us](mailto:jackie.whelan@state.co.us)

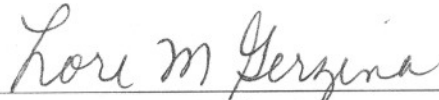
*(For any facsimile transmittals, please include a cover sheet addressed to Ms. Whelan.)*

**SCOPE OF AMENDMENT NUMBER ONE**

The scope of this Amendment Number One to Enforcement Order Number DC-051107-1 is limited to the revisions outlined above. All other terms and conditions of the Enforcement Order shall remain unchanged and in effect.

Issued at Denver, Colorado, this 31<sup>st</sup> day of March, 2009.

**FOR THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT**

A handwritten signature in cursive script that reads "Lori M Gerzina". The signature is written in dark ink and is positioned above a horizontal line.

Lori M. Gerzina, Section Manager  
Compliance Assurance and Data Management Section  
Water Quality Control Division

